UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/014,323	12/10/2001	Bruce Cole	Juniper-1 (JNP-0031)	1492

7590 08/25/2008

STRAUB & POKOTYLO
620 TINTON AVENUE
BLDG, B, 2ND FLOOR
TINTON FALLS, NJ 07724-9071

EXAMINER	
NG, CHRISTINE Y	

ART UNIT	PAPER NUMBER
2616	

MAIL DATE	DELIVERY MODE
08/25/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/014,323	COLE ET AL.	
	Examiner	Art Unit	
	CHRISTINE NG	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 June 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *11-28 and 30-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *20-28,35 and 36* is/are allowed.

6)☒ Claim(s) *11-19 and 30-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 December 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 11-19 and 30-34 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 7,031,252 to Hosler et al.

Referring to claim 11, 16, 18 and 19, Hosler et al disclose in Figure 2 a router (router 201 and 202, which may be in combined in one router) having, at a given time, a currently designated routing facility (working interface 214) and a current standby routing facility (protect interface 216). Refer to Column 5, lines 40-47. A method comprises:

a) Informing an external node (ADM 210) that the router has redundant routing facilities. ADM 210 knows there are two interfaces 214 and 216, since ADM 210 selects which interface to receive data from. Refer to Column 6, lines 25-34 and lines 47-49.

b) Informing an external node of the identity of the currently designated routing facility. The system uses "bytes K1 and K2 in the line overhead portion of the frame to identify the interface, either working or protect, from which an ADM is currently receiving data" (Column 6, lines 18-22).

c) Providing, with the currently designated routing facility when it is in a state of being the designated routing facility, network information to the external node in accordance with a routing protocol (IS-IS or BGP; Column 5, line 64 to Column 6, line 5). Using the IS-IS or BGP routing protocol, ADM 210 communicates data with both working interface 214 and protect interface 216, but only listens to one currently selected interface. Refer to Column 6, lines 12-39.

d) Providing, with the current standby routing facility when it is in a state of being the standby routing facility, network information to the external node in accordance with a routing protocol (IS-IS or BGP; Column 5, line 64 to Column 6, line 5). ADM 210 still maintains an ongoing protocol dialogue with the other interface that is not currently selected. Even though there is no data transmission to the standby routing facility, the "ongoing protocol dialogue" is still functioning according to the routing protocol since the standby routing facility must take over the role of a failed designated routing facility. The exchange of protocol dialogue must be done in accordance to a routing protocol. Refer to Column 6, lines 12-39.

Wherein the external node runs a routing protocol (IS-IS or BGP; Column 5, line 64 to Column 6, line 5) peering with a routing protocol run by the router.

Referring to claim 12, Hosler et al disclose in Figure 2 disclose wherein the currently designated routing facility and current standby routing facility share a common forwarding facility (fiber optic lines 205). Refer to Column 5, lines 40-47.

Referring to claim 13, Hosler et al disclose in Figure 2 wherein the act of informing an external node that the router has redundant routing facilities includes

generating and transmitting a message including an identification of the router, an address of the currently designated routing facility, and an address of the current standby routing facility. The system uses "bytes K1 and K2 in the line overhead portion of the frame to identify the interface, either working or protect, from which an ADM is currently receiving data" (Column 6, lines 18-22). Furthermore, each interface is associated with destination network addresses which are based on the Internet Protocol. Each router must also have its own identification since each router contains different interfaces for different network destinations and if network configuration changes, every involved router is notified of the new configuration. Refer to Column 5, line 64 to Column 6, line 5; and Column 7, lines 14-16.

Referring to claim 14, Hosler et al disclose in Figure 2 wherein the act of informing an external node that the router has redundant routing facilities uses an existing BGP message format. Refer to Column 5, line 64 to Column 6, line 5.

Referring to claims 15 and 30, Hosler et al disclose wherein the method further comprises:

e) If a failure of the currently designated routing facility is determined, then

i) electing the current standby routing facility as a new designated routing facility.

ii) informing the external node of the identity of the newly elected new designated routing facility. In an APS 1+1 system, data is transmitted on the working and protect interfaces so if the working interfaces fails, the protect interfaces takes over. Refer to Column 2, lines 1-11 and Column 11, lines 1-13. Furthermore, the system uses "bytes K1 and K2 in the line overhead portion of the frame to identify the interface, either

working or protect, from which an ADM is currently receiving data" (Column 6, lines 18-22).

Referring to claim 17, Hosler et al disclose in Figure 2 wherein the currently designated routing facility has a first internet address and the current standby routing facility has a second internet address. Each interface is associated with destination network addresses which are based on the Internet Protocol. Refer to Column 5, line 64 to Column 6, line 5; and Column 7, lines 14-16.

Referring to claims 31 and 33, Hosler et al disclose in Figure 2 wherein the external node is a second router which is external to the router having, at a given time, a currently designated routing facility and a current standby routing facility. ADM 210 is a router since it routes information to remote ADM 212 and router 209.

Referring to claims 32 and 34, Hosler et al disclose in Figure 1 wherein the router and the second router belong to different autonomous systems. A SDH/SONET network can encompass different autonomous systems, such as the backbone system 110/120 and backbone system 130/140. Refer to Column 4, lines 21-34.

Allowable Subject Matter

3. Claims 20-28, 35 and 36 are allowed.

Response to Arguments

4. Applicant's arguments filed June 3, 2008 have been fully considered but they are not persuasive.

Referring to the argument of independent claims 11, 16, 18 and 19 (page 10, line 15 to page 12, line 33): Refer to the new rejection of claims 11, 16, 18 and 19.

Referring to the argument of claim 13 (page 13, lines 1-24): Hosler et al disclose that the system uses "bytes K1 and K2 in the line overhead portion of the frame to identify the interface, either working or protect, from which an ADM is currently receiving data" (Column 6, lines 18-22). Therefore, the external node will receive a message with the K1 and K2 bytes informing it of which interface is working and which interface is protect. Refer to Column 5, line 64 to Column 6, line 5; and Column 7, lines 14-16.

Referring to the argument of claim 14 (page 13, line 25 to page 14, line 5): Hosler et al discloses the use of the BGP format to maintain routing tables and to inform router of network parameters, such as when a network configuration changes. A routing table can include information on different network interfaces and which one is currently being used. Refer to Column 5, line 64 to Column 6, line 5.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTINE NG whose telephone number is (571)272-3124. The examiner can normally be reached on M-F; 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Firmin Backer can be reached on (571) 272-6703. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

C. Ng
August 18, 2008

/FIRMIN BACKER/
Supervisory Patent Examiner, Art Unit 2616